

SENECIO SPRIBILLEI (ASTERACEAE: SENECEONEAE),
A NEW SPECIES FROM MONTANA, U.S.A.

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ABSTRACT

Senecio spribillei W.A. Weber, a new, putatively narrow endemic species of Asteraceae, is described from a nunatak in the Rocky Mountains of northwestern Montana. It is distinguished from its nearest relative, *Senecio neowebsteri* Blake, by glabrous foliage, broader and shorter leaf laminae, wingless petioles, coarser marginal dentation, smaller, racemose capituli and minute ray flowers.

RESUMEN

Se describe *Senecio spribillei* W.A. Weber, una nueva especie endémica de Asteraceae, de un nunatak en las Montañas Rocosas del noroeste de Montana. Se diferencia de su pariente más próximo, *Senecio neowebsteri* Blake, por sus hojas glabras, lámina foliar más ancha y más corta, peciolo sin alas, dientes del margen con dientes más juntos, capítulos racemosos más pequeños y lígulas diminutas.

Senecio spribillei W.A. Weber, sp. nov. (**Fig. 1**). TYPE: U.S.A. MONTANA. Lincoln Co.: Cabinet Mountains, E face of Snowshoe Peak, ca. 150 m below the summit, N48°13'40" W115°40'40"; on sparsely vegetated alpine rock ledges, with *Dryas octopetala* and *Carex albonigra*, 2500 m alt., 25 Aug 2001, *Toby Spribille & M. Arvidson 11264* (HOLOTYPE: MO; ISOTYPE: COLO).

Herba perennis usque ad 2.0 dm alta, tota glabra, caudices brevi-ramosa, folia caulis juvenilis basalibus longepetiolatis 0.5 dm longis, folia basalibus caulis floriferis longepetiolatis 0.5 dm longis induviis, folia caulina 4-5, laminibus late triangulo-ovatis vel subrotundis 3-4 × 2.5-3.0 cm longis et latis, truncatis vel ad basi brevissimo-cuneatis, grosse spinuloso-dentatis, petiolis non alatis, 4-5 cm longis, purpureis; capituli 4-6, nutantes, inferiore longe-pedunculata, involucris 8-10 mm altis, discis 5-7 mm diametris, phyllariis glabris lanceolatis obtusis late hyalinis, floribus radii paucis angustissimis.

Perennial from a well-developed, often branched caudex, up to 2 dm tall, totally glabrous; first year shoots 0.5 dm long, consisting of a few basal leaves on long petioles; flowering stem (second season) with withered basal leaves, cauline leaves with lamina broadly triangular-ovate to subrotund, 3.0-4.0 × 2.5-3.0 cm, truncate or very shortly cuneate at the base, coarsely spinulose-dentate, petioles scarcely winged, 4-5 cm long, purple; cauline leaves 4-5, similar to the basal leaves; heads 4-6, nodding, the lower on long, erect peduncles; involucre 8-10 mm high, the disk 5-7 mm diam, with a single row of phyllaries and a few minute basal bracteoles; phyllaries lance-oblong, obtuse or broadly acute, with broad hyaline margins, glabrous; ray flowers few, little exceeding the involucre, the lamina 7 × 2 mm, the veins 4-5, simple, the tube 4 mm long; disk flowers with limb 4 mm, tube 4 mm long; pappi 3 mm long; cypselae linear, strongly ribbed, 3 mm long.

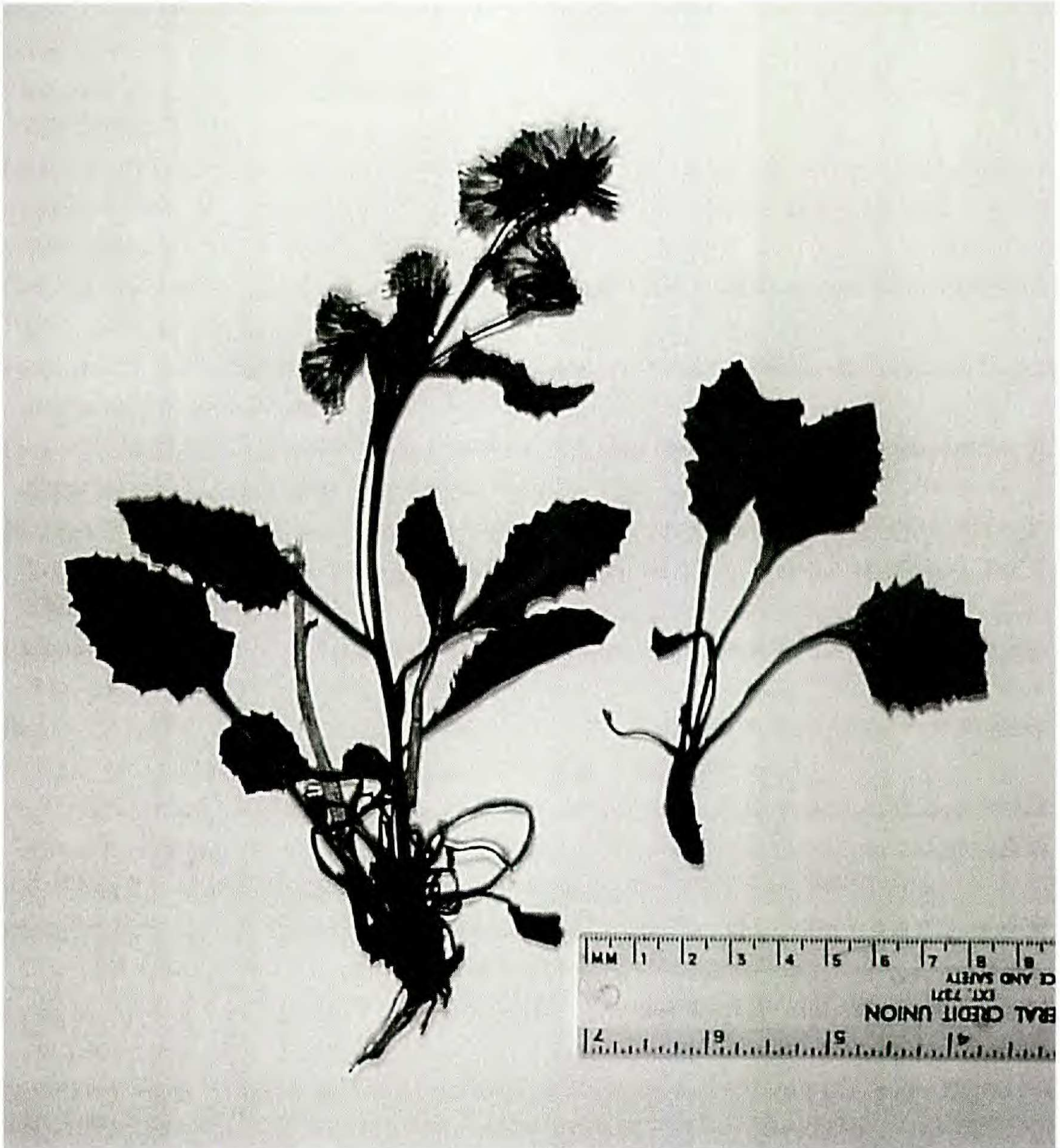


FIG.1. *Senecio spribillei*, holotype.

This new species is most closely allied with *S. neowebsteri* Blake (*S. websteri* Greenman, non Hook.), an endemic of the Olympic Mountains of Washington (Table 1). It appears to be a narrow endemic of northwestern Montana.

The ray flowers in the new species are so short and so narrow that the collector believed that the plant was rayless. The structural anatomy of the ray flowers differs from that of *Senecio neowebsteri*. In *S. spribillei* the nerves of the ray flowers are simple, unbranched; in *S. neowebsteri* each nerve is forked near the base, the branches continuing closely parallel distally. Baaghoe (1977, 1978) published on the taxonomic application of ligule micro-characters in the

TABLE 1. Comparison of *Senecio spribillei* and *Senecio neowebsteri*.

<i>Senecio spribillei</i>	<i>Senecio neowebsteri</i>
Foliage glabrous	Foliage initially floccose, then glabrate
Leaf lamina almost isodiametric, coarsely dentate, the base truncate	Leaf lamina usually longer than broad, variably dentate, the base cuneate
Petioles not winged	Petioles winged
Heads several, 6–8 mm tall, disk 5–7 mm diam	Heads solitary, 10–15 mm tall, disk 9–12 mm diam
Ligules of ray flowers 7–12 mm, hardly longer than the involucre	Ligules of ray flowers 25–30 × 3–5 mm, much longer than the involucre
Tubes of disk flowers 4 mm, limb 4 mm	Tubes of disk flowers 6 mm, limb 4 mm
Cypselae linear, strongly ribbed, 5 mm long	Cypselae linear, strongly ribbed, 3 mm long
Pappi white, 7 mm long	Pappi white, 3 mm long

Asteraceae but made no mention of venation or possible differences involving venation. Her work dealt with light and electron microscope observations, mostly on epidermal features. The existence of branched and non-branched nerves in *Senecio*, s. lat. deserves attention.

Distribution.—Known only from the type collection. According to the collector, the locality is likely a nunatak north of the southernmost limits of the Pleistocene ice sheets.

Etymology.—*Senecio spribillei* is dedicated to the young taxonomist and phytosociologist, Toby Spribille, with whom I have been associated for several years. His keen eye and ability to deal with the lichen and bryophyte as well as the phanerogamic flora, his knowledge of phytosociology, and his fine collections, marks him as an important figure in the recent history of the Rocky Mountain flora in Montana.

REFERENCES

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